

NEW ENGLAND NOTE

TRIPHORA TRIANTHOPHORA IN MASSACHUSETTS AND VERMONT

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Triphora trianthophora (Swartz) Rydberg is a small and inconspicuous orchid that flowers in mid to late August and fruits in September in southern Vermont. *Triphora* reaches the northern limit of its range in New England. Crow et al. (1981) classify *Triphora* as rare in New England but not threatened or endangered. Coddington & Field (1978) included the species on the Massachusetts list of rare and endangered plants. There is one historical Massachusetts station, from Conway, Franklin County, where the species was last collected in 1928 (*Allis s.n.*, AMES). *Triphora* is also on the Vermont rare and endangered list (Countryman, 1978). All Vermont records are from Windham Co., the southeast corner of the state, where *Triphora* was last collected in 1903, in Dummerston, (*Howe s.n.*, VT). Vermont also has documented historical stations from Brattleboro and Newfane. Rugg (1950) reported the Brattleboro station was last seen circa 1925 and described a station he discovered in 1943 in Brookline, Vermont.

Photographs of plants from each of the four known extant *Triphora* populations in Massachusetts and Vermont were made in 1981 and are on deposit in the Pringle Herbarium (VT).

MASSACHUSETTS: FRANKLIN COUNTY

Greenfield. Station discovered by the author in 1981. Two plants, one in flower on 19 August.

VERMONT: WINDHAM COUNTY

Brattleboro. Roberta Poland and Herman Willey provided directions to find this colony. Seventeen plants total, fourteen flowering on 18 August, three fruiting on 20 September.

Brookline. This is Rugg's 1943 station. Roberta Poland guided the author to the site. Thirteen plants, seven flowering on 18 August.

Dummerston. Station discovered by Roberta Poland in 1981. Eleven plants, ten flowering on 18 August, six fruiting on 19 September.

At each *Triphora* station the habitat was strikingly similar: an old-age or maturing forest, dominated by *Tsuga canadensis* (L.) Carriere and *Fagus grandifolia* Ehrhart. At the Massachusetts station the beeches were the largest trees, averaging 9-inch DBH. In Brookline the largest trees were hemlocks, averaging more than 14-inch DBH. Other prominent woody species in the woodlots were *Acer saccharum* Marshall, *Acer rubrum* L., and *Ostrya virginiana* (Miller) K. Koch. Under the dense shade of the late summer canopy few competing herbs were present. I observed widely scattered plants of *Corallorhiza maculata* Rafinesque, *Maianthemum canadense* Desfontaines, *Monotropa uniflora* L., and *Epifagus virginiana* (L.) Barton. Most of the *Triphora* were restricted to leaf-lined depressions on gentle slopes.

Triphora's hemlock and beech habitat is regenerating in western Massachusetts and southern Vermont, and this tiny orchid is likely to be found at several new stations if a search is made for it. The four sites I visited are on private land, and are threatened by road widening, logging, or development.

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LITERATURE CITED

- CODDINGTON, J. & K. G. FIELD. 1978. Rare and Endangered Vascular Plant Species in Massachusetts. The New England Botanical Club in cooperation with the U.S. Fish & Wildlife Service, Newton Corner, MA. 52 pp.
- COUNTRYMAN, W. D. 1978. Rare and Endangered Vascular Plant Species in Vermont. The New England Botanical Club in cooperation with the U.S. Fish and Wildlife Service, Newton Corner, MA. 68 pp.
- CROW, G. E., W. D. COUNTRYMAN, G. L. CHURCH, L. M. EASTMAN, C. B. HELLQUIST, L. L. MEHRHOFF, & I. M. STORKS. 1981. Rare and endangered vascular plant species in New England. *Rhodora* **83**: 259–299.
- RUGG, H. G. 1950. Rare orchids in Vermont. *Joint Bulletin of the Vermont Botanical and Bird Clubs* **18**: 51–55.

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